ABSTRACT

Methods and apparatus are disclosed for distributing flow control information in a packet switching system. In one packet switching system, flow control information is collected in a data structure in the first stage switching elements. Each of these switching elements transmit data from the flow control data structure as small messages or in fields included in packets being sent across multiple statically allocated paths. Flow control information is received by next stage elements, which are programmed to forward only flow control information received from a limited number of components or over a limited number of paths. The first stage switching elements may also periodically or occasionally delay sending flow control information or send a dummy message or information to accommodate bandwidth transmission differences between components of the packet switching system, including to accommodate bandwidth variations caused by plesiochronous timing across the network.